

## CLAIMS

What is claimed is:

1. A tire pressure monitoring system comprising:  
a plurality of tires each including a tire pressure sensor operable to send a tire pressure signal including a code;  
an initiation member associated with each of said tires, said initiation member being operable to send an initiation signal to its respective tire pressure sensor causing said respective tire pressure sensor to send a response signal, each of said initiators having a unique frequency of sending out said initiation signal; and  
a control for receiving said response signals and identifying a particular location on a vehicle based upon a frequency of said response signals.
2. A system as set forth in Claim 1, wherein each of said initiators sends an LF signal to each of said tire pressure sensors.
3. A system as set forth in Claim 1, wherein each of said tire pressure sensors periodically report on the tire pressure on an RF wavelength, and each of said initiators ping said tire pressure sensors on an LF wavelength.
4. A system as set forth in Claim 1, wherein each of said initiators have a unique time period for initiating a response localization signal.

5. A method of associating a location of a particular reporting sensor on a vehicle comprising the steps of:

(1) providing a plurality of tires on a vehicle, and providing each of said tires with a sensor for sending a tire pressure sensor signal along with a code;

(2) providing an initiation member associated with each of said tires, said initiation member being operable to send an initiation signal to its respective sensor and causing said respective sensor to send a responsive localization signal, each of said initiation members being operable to send an initiation signal on a unique frequency such that each of said responsive localization signals will have its own unique frequency; and

(3) receiving said responsive localization signals from each of said tires, and determining a location for each of said responsive localization signals based upon a frequency of said responsive localization signals.

6. A method as set forth in Claim 5, wherein a location of each of said tire codes is initially learned at a factory, and a location of each of said frequencies is then learned based upon the reporting frequency of each of said learned codes, and once said tires are moved or rotated, said reporting frequency is utilized to localize the tires subsequently.